

SUPPLEMENTARY NOTES ON THE AMERICAN SPECIES

OF STRYCHNOS. XV.

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Contents

Introduction.	17
Discussion of spp. of sect. <i>Strychnos</i> (# 1-38).	18
" " " " " <i>Rouhamon</i> (#39-48).	21
" " " " " <i>Breviflorae</i> (#49-71).	21
Bibliography.	22

Introduction

Since the previous paper in this series was submitted for publication in 1976, 75 new collections were examined. The newly examined collections added to our knowledge of several species, and extensions of range were noted for ten. The extensions of *S. nigricans* to the well-collected State of Paraná, Brazil, and of *S. poeppigii* to Panama, Panama, are most interesting. No new species were described. It was particularly interesting to see fruits (unfortunately, not completely mature) of *S. tabascana* for the first time. The shells of these fruits are thicker than those of the closely related *S. panamensis*. The corolla of *S. tabascana* is pubescent externally, whereas that of *S. panamensis* is glabrous.

The chemical work of Professor Marini-Bettolo and his associates is continuing, as may be seen from the bibliography.

In a previous paper, I mentioned the very timely and interesting contributions made by Dr. Gillelan T. Prance concerning the botanical ingredients of Curare as prepared by four Indian tribes. Three species of *Strychnos* were identified previously: *S. bredemeyeri* used by Mayongong and Sanama Indians of Roraima, and *S. cogens* and *S. solimoesana* used by Jamamadi Indians of the basin of the Rio Purus. Other specimens, sterile and from comparatively young plants, are still under study. Details on the preparation of Curare will be published elsewhere.

S. peckii is reported by Alberto T. Ortega as an ingredient of Curare in Morona Santiago, Ecuador.

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6. Strychnos rondelettioides Spruce ex Bentham, Jour. Linn. Soc. 1: 104. 1856.

Venezuela: Amazonas: Paul E. Berry 638. Brazil: Amazonas: basin of Rio Purus, Prance et al. P21206, P21207, P3403. Perú: Loreto: Juan Revilla 174, Al. Gentry et al. 16677, s.n. (Jan. 1976).

Specimens from the basin of the Rio Purus are from plants which are used as a fish poison by Paumari Indians. Their name for this plant is "Jadadakaikapihai."

10. Strychnos brachiata Ruiz & Pavón, Fl. Per. 2: 30. 1799.

Colombia: Boyaca: C. Sastre 766. Perú: San Martín: Mariscal Cáceres, Tocache Nuevo, J. Schunke 2310.

This is the first record of this species from Boyaca.

11. Strychnos trinervis (Velloso) Martius, Syst. Mat. Med. Bras. 121. 1843.

Brazil: Minas Gerais: Serra de Cipó, JBR 114491 (MO); Guanabara: JBR 109209; Paraná: mun. Antonina, Hatschbach 33409.

12. Strychnos panamensis Seemann, Bot. Voy. Herald, 166. 1854.

Mexico: Chiapas: Mapastepec, alt. + 180 m, Breedlove & Thorne 30708. Panama: Chiriquí: Croat 21935 (MO); Canal Zone: Croat 10097. Venezuela: Zulia: F. D. Chitti & Benkowski 3146. Colombia: Chocó: Al. Gentry 9430.

13. Strychnos tabascana Sprague & Sandwith, Kew Bull. 1927: 128. 1927.

Mexico: Chiapas: mun. La Trinitaria, alt. + 1300 m, montane rain forest, Breedlove 38882; mun. Las Margaritas, alt. + 350 m, tropical rain forest, Breedlove 33158.

Breedlove 38882 is a very valuable specimen, as it is the first specimen seen with immature fruits. The shells of these fruits are thicker than those of S. panamensis.

18. Strychnos medeola Sagot ex Progel in Mart. Fl. Bras. 6(1): 282. 1868.

Brazil: Pará: Nilo T. Silva 3352 (IAN).

19. Strychnos toxifera Robert Schomburgk ex Bentham, Jour. Bot. Hook. 3: 240. 1841.

Guyana: Kanuku Mtns., R. Goodland & Maycock 461. Colombia: Chocó: Al. Gentry & Aguirre 15196 (MO). Brazil: Manaus: Prance et al. 23569.

These are the first records of this species from Chocó as well as from the lower Rio Negro.

21. Strychnos diabolii Sandwith, Kew Bull. 1931: 486. 1931.

Venezuela: Amazonas: San Carlos de Rio Negro, Paul E. Berry 1544.

This is the first record of this species from Venezuela.

23. Strychnos sandwithiana Krukoff & Barneby, Mem. N. Y. Bot. Gard. 20(1): 36. 1969.

Perú: San Martín: Mariscal Cáceres, Tocache Nuevo, J. Schunke 43, 56.

This is the first record of this species from Peru.

24. Strychnos jobertiana Baillon, Adansonia. 12: 367. 1879.

Venezuela: Amazonas: San Carlos de Rio Negro, Paul E. Berry 1405, 1447. Brazil: Amazonas: Manaus-Itacoatiara road, km 13, W. Rodrigues & A. Loureiro 9519.

25. Strychnos pseudo-quina A. St. Hilaire, Mém. Mus. Paris 9: 340. 1822.

Brazil: Mato Grosso: Cuiabá, Hatschbach 34010, 36072; Minas Gerais: J.B.R. 130177 (MO); Sao Paulo: Oswaldo Handro 439 (S).

28. Strychnos solimoesana Krukoff, Brittonia 4: 280. 1942.

Brazil: Amazonas: basin of Rio Purus, Prance et al. P21254; Manaus-Porto Velho road, Prance et al. 22884.

Prance et al. P21254 is an ingredient of Jamamadi arrow poison and Prance 22884 is the first record of this species from the basin of the Rio Negro.

31. Strychnos peckii B. L. Robinson, Proc. Amer. Acad. 49: 504. 1913.

Perú: San Martín: Mariscal Cáceres, Tocache Nuevo, J. Schunke 39, 42. Ecuador: Morona Santiago, alt. + 300 m, Alberto T. Ortega U. 401.

Ortega's label reads: "usado para envenenar las flechas." Schunke's specimens are the first record of this species from San Martín.

32. Strychnos erichsonii Richard Schomburgk, Reisen 3: 1082. 1848. nomen: ex Progel in Mart. Fl. Bras. 6(1): 274. 1868.

Surinam: J. C. Lindeman 522 (SW plateau covered by ferrobauxite, 550-710 m alt.), LBB 15301 (dist. Para). French Guiana: Maroni River, Sastre & Moretti 4024. Brazil: Amazonas: Prance 24541 (basin of Rio Içá, + 5 km above mouth), Mori & Prance 9121, 9126 (Rio Jandiatuba, + 10 km downstream from São Paulo de Olivença). Perú: lower Anpiyacu, north of Rio Marañon, Prance 24699.

The two collections from Rio Jandiatuba are from white-water varzea forest, both collected on February 26 in flower. They are the best collections I have ever seen in flower; I refer particularly to the well-preserved creamy-yellow papillose corolla tubes.

32a. Strychnos croatii Krukoff & Barneby.

Panama: Panama: Croat s.n. (transect. #114).

35. Strychnos bredemeyeri (Schultes) Sprague & Sandwith, Kew Bull. 1927: 128. 1927.

Venezuela: Amazonas: Paul E. Berry 1607. Brazil: Roraima: vicinity of Auaris, Prance et al. 21502.

Prance writes on the label: "used as an ingredient of Mayongong and Sanama Curare."

"Cumuduá" or "Cumarua" (Mayongong Indian dialect), "Mogoli" (Sanama Indian dialect).

36a. Strychnos mitscherlichii Richard Schomburgk, Reisen 2: 451. 1848, var. mitscherlichii.

Surinam: Lely Mts., SW plateau covered by ferrobauxite, 550-710 m, Lindeman et al. 234, 734. Brazil: Amazonas: Prance et al. 23445 (near Manaus), 24426 (Rio Solimões, Ilha Jurupari and vicinity). Perú: San Martín, Mariscal Cáceres, Tocache Nuevo, J. Schunke 40.

37. Strychnos solerederi Gilg in Engler, Bot. Jahrb. 25 (Beibl. 60): 40. 1898.

Perú: San Martín: Mariscal Cáceres, Tocache Nuevo,
J. Schunke 8144.

39. Strychnos guianensis (Aublet) Martius, Syst. Mart. Med. Bras. 121. 1843.

Brazil: Amazonas: upper Rio Solimões, Mori & Prance 9036 (Paraná de Tonantins), 2206 (Igarapé Preto, near Belem). Perú: Loreto: Al. Gentry et al. 16675, Juan Revilla 172.

43. Strychnos panurensis Sprague & Sandwith, Kew Bull. 1927: 132. 1927.

Colombia: Chocó: Duke 13331 (MO) (Rio Truando), 15800 (MO). Perú: San Martín: Mariscal Cáceres, Tocache Nuevo,
J. Schunke 44.

47. Strychnos cogens Bentham, Jour. Bot. Hook. 3: 241. 1841.

Brazil: Amazonas: basin of Rio Purus, Prance et al. 23438.

This is the main ingredient of Jamamadi arrow poison; "Iha" (Jamamadi Indian dialect).

This is the first record of this species from the basin of the Rio Purus.

48. Strychnos melinoniana Baillon, Bull. Soc. Linn. Paris 1: 256. 1880.

Surinam: Lely Mountains, alt. + 650 m, Mori & Bolten 8493.

53. Strychnos fendleri Sprague & Sandwith, Kew Bull. 1927: 129. 1927.

Marini-Bettolo and collaborators investigated the alkaloids found in this species (Gazzetta Chimica Italiana 106: 773-777. 1976). The stem bark was found to contain seven tertiary alkaloids. The structure of four of these is reported.

56. Strychnos parvifolia DC., Prodr. 9: 16. 1845.

Brazil: Guanabara: JBR 114845.

59. Strychnos brasiliensis (Sprengel) Martius, Flora 24 (Beibl. 2): 84. 1841.

Brazil: Rio de Janeiro: JBR 141312 (MO), 141313 (MO);
 Guanabara: JBR 55680; Paraná: Hatschbach 35135, 35625.

63. Strychnos brachistantha Standley, Field Mus. Publ. Bot. 12: 412. 1936.

Belize: Corozal: alt. + 33 m, Croat 24961.

64. Strychnos nigricans Progel in Mart. Fl. Bras. 6(1): 280. 1868.

Brazil: Paraná: Rio Putunã, Hatschbach 35591.

This is the first record of this species from the State of Paraná.

69. Strychnos poeppigii Progel in Mart. Fl. Bras. 6(1): 282. 1868.

Panama: Panama: natural bridge along Madden Lake, Croat 12403.

This is the first record of this species from Panama.

70. Strychnos tarapotensis Sprague & Sandw., Kew Bull. 1927: 131. 1927.

Perú: San Martín: T. Plowman & H. Kennedy 3812 (ECON), J. Schunke 8150 (Mariscal Cáceres, Tocache Nuevo); Madre de Dios: Plowman & Davis 5067.

This is the first record of this species from Madre de Dios.

Bibliography

(In order to conserve space, I am citing here only the papers which are not cited in Suppl. VII-XIV.)

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- 109r. Marini-Bettolo, G. B., et al. XXIX. New indole alkaloids from *Strychnos fendleri* Sprague & Sandwith. *Gazzetta Chimica Italiana* 106: 773-777. 1976,
- 109s. Marini-Bettolo, G. B., et al. Sul curaro Yanoáma. Un nuovo tipo di curaro indigeno: "Curare di torrefazione e percolazione." *Lincei. Rend. Sc. fis. mat. e nat.* 38: 34-38. 1965.